



Certificate Of Analysis

BUREAU VERITAS COMMODITIES AND
TRADE DE PANAMA, S.A
Colón Laboratory
Bahía Las Minas, Provincia de Colón
Colón, Republica de Panama
+507 444-1277
panama.lab@bureauveritas.com

Asset Type	Shore Tank	Submitted By	Bureau Veritas Commodities and Trade de Panama
Asset Name	Tanques de Minera / Punta Rincón	Inspection Location	Punta Rincon
Operation Type	Inventory Inspection	Date Sampled	30-Sep-2024
Product	ULSDO	Date Received	01-Oct-2024
Client	Terpel Panama	Date Tested	02-Oct-2024
Client Reference	TBA	Date Reported	02-Oct-2024

Tanques de Minera / Punta Rincón -Surtidor MSA Running Inventory Inspection				
PAPAN-24-00907-001 ^{1,2,3}				Specification (RCTA 75.02.17:19)
Test	Method	Unit	Result	Min/Max
Density at 15°C	ASTM D4052-22	g/mL	0.8329	--
API Gravity @60°F	ASTM D4052-22	°API	38.3	--
Specific Gravity at 15/15°C	ASTM D4052-22	--	0.8337	--
Corrected Flash Point	ASTM D93A-20	°C	66.0	52.0 min
Sulfur Content	ASTM D5453-19a	mg/kg	6.6	15 max
Manual/Automated	ASTM D86-23ae1	--	Manual	--
Obs Baro Pressure	ASTM D86-23ae1	mm Hg	760	--
IBP	ASTM D86-23ae1	°C	173.0	--
10% Recovered	ASTM D86-23ae1	°C	199.0	--
50% Recovered	ASTM D86-23ae1	°C	252.0	--
90% Recovered	ASTM D86-23ae1	°C	322.0	360 max
Endpoint	ASTM D86-23ae1	°C	351.0	--
Recovery	ASTM D86-23ae1	% (V/V)	98.0	--
Loss	ASTM D86-23ae1	% (V/V)	1.0	--
Residue	ASTM D86-23ae1	% (V/V)	1.0	--
Cetane Index	ASTM D976-21e1	--	49.5	45 min
Test Temperature**	ASTM D6079-22	°C	60	--
Major Axis**	ASTM D6079-22	mm	0.44	--
Minor Axis**	ASTM D6079-22	mm	0.37	--
Wear Scar Diameter**	ASTM D6079-22	µm	400	520 max
Water and Sediment	ASTM D2709-22	% (V/V)	< 0.01	0.05 max
>= 4 µm(c)**	ISO 4406:2021 ⁴	ISO code	719.83	--
>= 6 µm(c)**	ISO 4406:2021 ⁴	ISO code	425.03	--

** Test(s) not within the scope of LE No. 003 certificate issued by the Consejo Nacional de Acreditacion de Panamá, in accordance with the criteria of DGNTI-COPANIT-ISO / IEC 17025 as testing laboratories, in the facilities located in Bahías Las Minas (Colón) and Balboa (Panamá). For further information about accredited method, contact our laboratory.

Remark:

Contaminant code: 17/15/14

The information contained in this test report relates only to the sample(s) tested. This report shall not be reproduced except in full, without the written approval from Bureau Veritas laboratory. The company expressly disclaims any liability arising from the use of documents and/or the results obtained by our services in general, in relation to certifications of quality, quantity, weight, temperature, concentrations, units and/or supervision or other certificates issued; And in any case, be liable to the user or third parties for any loss or damage, compliance or not related to administrative or other obligations arising from the exhibition of these.

Certificate Of Analysis

**BUREAU VERITAS COMMODITIES AND
TRADE DE PANAMA, S.A**
Colón Laboratory
Bahía Las Minas, Provincia de Colón
Colón, Republica de Panama
+507 444-1277
panama.lab@bureauveritas.com

Asset Type	Shore Tank	Submitted By	Bureau Veritas Commodities and Trade de Panama
Asset Name	Tanques de Minera / Punta Rincón	Inspection Location	Punta Rincon
Operation Type	Inventory Inspection	Date Sampled	30-Sep-2024
Product	ULSDO	Date Received	01-Oct-2024
Client	Terpel Panama	Date Tested	02-Oct-2024
Client Reference	TBA	Date Reported	02-Oct-2024

Tanques de Minera / Punta Rincón -Surtidor MSA Running Inventory Inspection

PAPAN-24-00907-001^{1, 2, 3}

**Specification
(RCTA 75.02.17:19)**

Test	Method	Unit	Result	Min/Max
>= 14 µm(c)**	ISO 4406:2021 ⁴	ISO code	149.13	--

**** Test(s) not within the scope of LE No. 003 certificate issued by the Consejo Nacional de Acreditacion de Panamá, in accordance with the criteria of DGNTI-COPANIT-ISO / IEC 17025 as testing laboratories, in the facilities located in Bahias Las Minas (Colón) and Balboa (Panamá). For further information about accredited method, contact our laboratory.**

Remark:

Contaminant code: 17/15/14

Comments:

¹ Si el producto cumple con los valores establecidos en este reglamento, se considerará apto para la venta aún cuando su apariencia no sea claro y brillante.

² Si el valor del índice de cetano calculado es menor de 45,0 mín. se debe realizar la prueba del número de cetano.

³ 1 mm2/ = 1 cSt.

⁴ Analysis performed by subcontracted laboratory

AUTHORIZED SIGNATURE



Barney Ramirez, Lab Technician

End of Report

The information contained in this test report relates only to the sample(s) tested. This report shall not be reproduced except in full, without the written approval from Bureau Veritas laboratory. The company expressly disclaims any liability arising from the use of documents and/or the results obtained by our services in general, in relation to certifications of quality, quantity, weight, temperature, concentrations, units and/or supervision or other certificates issued; And in any case, be liable to the user or third parties for any loss or damage, compliance or not related to administrative or other obligations arising from the exhibition of these.